THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of JKUAT)

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

DIPLOMA IN INFORMATION TECHNOLOGY – DIT MAY 2010

ECS 2202: SYSTEMS ANALYSIS & DESIGN I

SPECIAL/SUPPLEMENTARY EXAMINATION

SERIES: MAY/JUNE 2012
TIME: 2 HOURS

Instructions to Candidates:
You should have the following for this examination
   Answer Booklet
This paper consist of **FIVE** questions
Answer any **THREE** questions. Question **ONE** is compulsory
Maximum marks for each part of a question are as shown
This paper consists of **THREE** printed pages

Question 1 (Compulsory - 30 marks)

a) Describe the meaning of the following   (4 marks)
    i)   System theory
    ii) System decomposition

b) State any **FIVE** features of a system   (5 marks)

c) Identify any **FIVE** elements of a system   (5 marks)

d) Explain the difference in meaning between the following   (6 marks)
    i)   Decoupling and Coupling
    ii) Negative feedback and positive feedback
    iii) Open system and closed system

e) Why are there different types of information systems   (3 marks)

f) State any **THREE** functions of information systems   (3 marks)

g) Differentiate informal information systems from formal information systems   (4 marks)

Question 2 (20 marks)

a) Who is a system analyst   (2 marks)
b) Explain any **FOUR** roles of a system analyst   (8 marks)
c) Define the term 'Information System'   (2 marks)
d) Describe any **FOUR** components of information systems   (8 marks)

Question 3 (20 marks)

a) Describe the meaning of "Transaction Processing Systems"   (3 marks)

b) State any **FIVE** activities carried out by a Transaction Processing system   (5 marks)

c) Describe the meaning of "Transaction Processing Systems"   (3 marks)

d) Briefly explain the following data processing methods   (8 marks)

Question 4 (20 marks)

a) What is a Management Information System?   (3 marks)
b) State any **FIVE** functions of Management Information System   (5 marks)
c) State any **FOUR** examples of Management Information System   (4 marks)
d) Briefly describe any **FOUR** types of reports produced by MIS   (8 marks)

Question 5 (20 marks)

a) Describe any **THREE** levels of organizational information for management   (9 marks)

b) Briefly explain the following categories of information systems   (6 marks)

      i)   Informal information system

     ii) Formal information system

c) What are the most common types of information systems in an organization   (5 marks)